VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Abstract

The paragraph at page 35, lines 1-19 has been amended as follows:

A support circuit is adapted to be mechanically and electrically coupled to a semiconductor chip such that the support circuit and the chip in combination form a semiconductor chip assembly. The support circuit includes an insulative base and a conductive trace embedded in the insulative base. The conductive trace is a single continuous piece of metal, the conductive trace includes a pillar that extends above the insulative base and a routing line that is substantially covered by and extends below the insulative base, and an opening in the routing line has tapered sidewalls and a diameter that increases as height increases~~A method of manufacturing a support circuit includes providing a conductive layer with top and bottom surfaces, providing a top etch mask on the top surface that includes an opening that exposes a portion of the top surface, providing a bottom etch mask on the bottom surface that includes an opening that exposes a portion of the bottom surface, applying an etch to the exposed portion of the top surface through the opening in the top etch mask thereby etching partially but not completely through the conductive layer and forming a recessed portion in the conductive layer below the top surface, forming an insulative base on the recessed portion without forming the insulative base on the top surface, applying an etch to the exposed portion of the bottom surface through the opening in the bottom etch mask thereby forming a routing line in the recessed portion, applying an etch to the insulative base to form an opening in the insulative base that exposes a portion of the routing line, and applying an etch to the exposed portion of the routing line through the opening in the insulative base thereby forming an opening in the routing line with tapered sidewalls. The method may also include providing an adhesive beneath the support circuit, and applying an etch that enlarges the opening in the insulative base to expose a portion of a top surface of the routing line adjacent to the opening in the routing line and that forms an opening in the adhesive beneath the opening in the routing line~~.

REMARKS

Claims 51-70 are pending. In this Second Preliminary Amendment, the Abstract and Specification have been amended to improve clarity. No new matter has been added.

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance. Should any issues remain, the Examiner is encouraged to telephone the undersigned attorney.

I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office at telephone number 703-746-4343 on May 19, 2003.

D Sigmond 5/19/03

David M. Sigmond
Attorney for Applicant

Date of Signature

Respectfully submitted,

D Sigmond

David M. Sigmond
Attorney for Applicant
Reg. No. 34,013
(303) 554-8371
(303) 554-8667 (fax)